

02-04-1999

FORM PTO 1595  
-31 92



U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

100957988

MPRO 1-25-99

To the Honorable Commissioner of Patents and Trademarks. Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):  
 Jagannathan (NM:) Sarangapani  
 David R. Schrieker  
 Additional Names attached:  Yes  No

2. Name and address of receiving party(ies):  
 Name: Caterpillar Inc.  
 Internal Address: Intellectual Property Department  
 Street Address: 100 N.E. Adams Street  
 City: Peoria State: Illinois  
 Zip: 61629-6490  
 Additional name(s) & addresses attached?  Yes  No

J-542 U.S. PTO  
09/237163



3. Nature of Conveyance:  
 Assignment  
 Security Agreement  
 Other  
 Execution Date(s): 01/08/99

4. Application number(s) or patent number(s):  
 If this document is being filed together with a new application, the execution date of the application is 01/08/99.  
 A. Patent Application No.(s) 09/237163 B. Patent No.(s)  
 Additional numbers attached?  Yes  No  
 Title of Invention: APPARATUS AND METHOD FOR DIAGNOSING AN ENGINE USING AN EXHAUST TEMPERATURE MODEL  
 Attorney Docket No.: 96-720

5. Name and address of party to whom correspondence concerning document should be mailed:  
 Name: Marla L. Hudson  
CATERPILLAR INC.  
 Internal Address: Intellectual Property Dept.  
 Street Address 100 N. E. Adams Street  
 City: Peoria State: I  
 Zip: 61629-6490

6. Total number of applications and patents involved  1  
 7. Total fee (37 CFR §3.41) \$ 40.00  
 Enclosed  
 Authorized to be charged to deposit account  
 8. Deposit account number: 03-1129  
 (If charged duplicate copy attached)

9. Statement and signature:  
 To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.  
Marla L. Hudson Marla L. Hudson 01/25/99  
 Name of Person Signing Signature Date  
 Total number of pages comprising cover sheet, attachments, and document: [3]

Mail document to be recorded with required cover sheet information to:  
 Commissioner of Patents and Trademarks  
 Box Assignments  
 Washington, D.C. 20231  
 02/03/1999 JS HABAZZ 00000148 03:129 09237163  
 \$0.00 CH

ASSIGNMENT

WHEREAS, JAGANNATHAN (NMI) SARANGAPANI; and DAVID R. SCHRICKER, residing respectively at Peoria, Illinois; and Dunlap, Illinois, hereinafter referred to as ASSIGNORS. have invented a new and useful

APPARATUS AND METHOD FOR DIAGNOSING AN ENGINE USING AN EXHAUST TEMPERATURE MODEL

for which ASSIGNORS are about to file an international application and/or make application for Letters Patent in the United States of America. such invention being described and identified by said application having an attached International Application Request and/or an attached Declaration and Power of Attorney executed by ASSIGNORS on

January 8, 1999, and January 8, 1999; and

WHEREAS, CATERPILLAR INC., a Delaware corporation having a place of business at Peoria, State of Illinois, United States of America, hereinafter referred to as ASSIGNEE, is desirous of acquiring the entire right title and interest in and to said invention and any Letters Patent granted thereon by the United States of America and any foreign country;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) and for other good and valuable consideration received by ASSIGNORS from ASSIGNEE, the receipt of which is hereby acknowledged by ASSIGNORS;

1. ASSIGNORS hereby sell, assign, transfer and convey unto ASSIGNEE the entire right, title and interest in and to said invention, any application therefor, and any Letters Patent granted thereon by the United States of America and any foreign country, including any continuing application, reissue or extension thereof, together with the right to file applications and obtain patents for said invention in any foreign country, and covenant that ASSIGNORS have the full right to do so.

2. At the request and expense of ASSIGNEE, ASSIGNORS agree to communicate to ASSIGNEE any facts known respecting said invention, to execute all papers necessary to file any application on said invention necessary or desirable to aid ASSIGNEE in obtaining and enforcing proper protection for said invention in the United States of America and any foreign country.

3. ASSIGNORS hereby authorize and request the COMMISSIONER OF PATENTS AND TRADEMARKS to issue the United States Letters Patent on said invention, when granted, to CATERPILLAR INC.

4. This assignment shall inure to the benefit of ASSIGNEE, its successors, assigns and other legal representatives, and shall be binding upon ASSIGNORS, ASSIGNORS' heirs and legal representatives.

IN TESTIMONY WHEREOF, ASSIGNORS have executed this instrument.

S. Jay

JAGANNATHAN (NMI) SARANGAPANI

Jan 8, 1999

Date

IN WITNESS OF the execution hereof by JAGANNATHAN (NMI) SARANGAPANI we have hereunto set our hands.

Masoud K. Zarvagh 1-8-99  
Witness (1) (Date)

Address: 1723 W. Rickman Rd  
Peoria, IL 61615

N. ton Kitapini 1/8/99  
Witness (2) (Date)

Address: 4010 N. Brandywine Dr.  
Apt. 1209  
Peoria, IL 61614

David R. Schricker  
DAVID R. SCHRICKER

Jan 8, 1999  
Date

IN WITNESS OF the execution hereof by DAVID R. SCHRICKER we have hereunto set our hands.

[Signature] Jan 8, 1999  
Witness (1) (Date)

Address: 6516 N. University  
Peoria, IL 61614

Carol Gumbing Jan 1999  
Witness (2) (Date)

Address: 3911 N. Cl. V. St.  
Peoria, IL 61614